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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

UNITED STATES DEPARTMENT of AGRICULTURE--SOIL CONSERVATION SERVICE
and
COLORADO AGRICULTURAL EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State, and private organizations.

AS OF
FEB. 1, 1970

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Building, Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 340, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES.

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P O Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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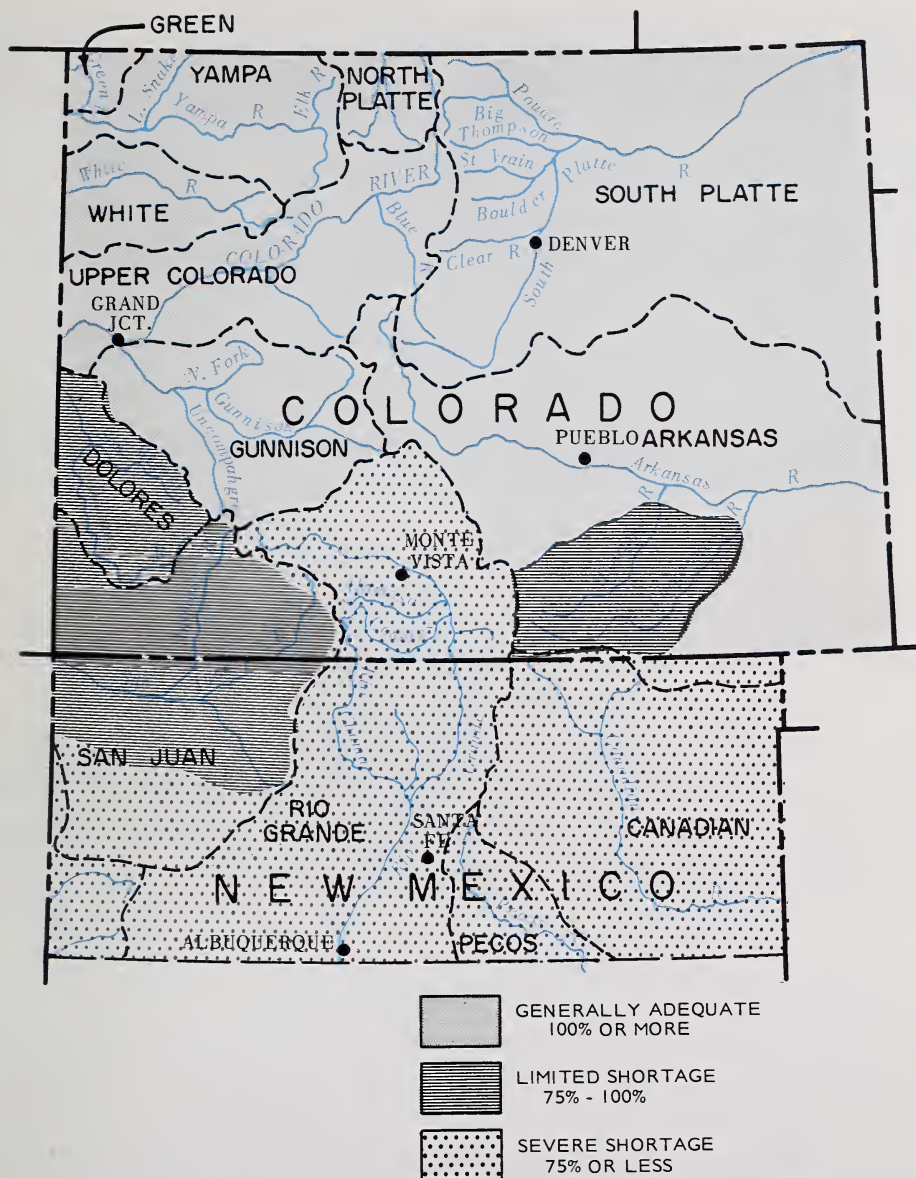
WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I	- SOUTH PLATTE RIVER WATERSHED Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.
WATERSHED II	- ARKANSAS RIVER WATERSHED Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca County, Southeastern Baca County, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, West Otero, East Otero, and Big Sandy Soil Conservation Districts.
WATERSHED III	- RIO GRANDE WATERSHED (COLORADO) Describes water supply conditions in Rio Grande, Center, Mosca Hooper, Mt. Blanca, Sanches, and Culebra Soil Conservation Districts.
WATERSHED IV	- RIO GRANDE WATERSHED (NEW MEXICO) Describes water supply conditions in Lower Cebolla, Abiquiu-Vallecitos, Eastern Taos, Lindrith, Coyote-Canones, Espanola Valley, Pojoaque, Jemez, Santa Fe-Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.
WATERSHED V	- DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, and Glade Park Soil Conservation Districts.
WATERSHED VI	- GUNNISON RIVER WATERSHED Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.
WATERSHED VII	- COLORADO RIVER WATERSHED Describes water supply conditions in DeBeque, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, Plateau Valley, South Side, and Mt. Sopris Soil Conservation Districts.
WATERSHED VIII	- YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, Upper White River, Lower White River, and Douglas Creek Soil Conservation Districts.
WATERSHED IX	- LOWER SOUTH PLATTE RIVER WATERSHED Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek, and Yuma Soil Conservation Districts.
APPENDIX I	- SNOW SURVEY MEASUREMENTS
APPENDIX II	- SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

February 1, 1970



The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS

as of

February 1, 1970

THE NORTHERN HALF OF COLORADO HAS AN EXCELLENT SNOW PACK. RESERVOIR STORAGE IS GOOD AND SOIL MOISTURE CONDITIONS ARE GOOD. GOOD WATER SUPPLIES ARE IN PROSPECT.

THE MIDDLE PORTION OF COLORADO IS NEAR NORMAL IN ALL CATEGORIES. SNOW IN THE SOUTHERN PORTION OF COLORADO AND NORTHERN NEW MEXICO IS DEFICIENT. CARRY-OVER STORAGE IS SLIGHTLY BETTER THAN NORMAL. VALLEY SOILS ARE REPORTED TO BE IN GOOD SHAPE.

MUCH ADDITIONAL SNOW IS NEEDED IN THIS AREA.



COLORADO -- THE SNOW PACK IN COLORADO VARIES WIDELY. THE NORTHERN PORTION OF THE STATE HAS AN EXCELLENT SNOW PACK. IT STARTED EARLY AND IS NOW THE MAXIMUM OF RECORD IN SOME PLACES.

THE MIDDLE OF THE STATE HAS NEAR NORMAL TO SLIGHTLY ABOVE SNOWFALL, WHILE THE SOUTHERN PORTION IS MUCH BELOW NORMAL. SOIL MOISTURE IS NORMAL OR ABOVE OVER THE STATE. VALLEY SOILS ARE IN GOOD CONDITION IN MOST OF THE IRRIGATED AREAS. RESERVOIR STORAGE IS GOOD OVER THE ENTIRE STATE.



NEW MEXICO -- THE SNOW PACK IS VERY POOR OVER ALL OF NORTHERN NEW MEXICO. MANY SNOW COURSES ARE APPROACHING A MINIMUM OF RECORD. SOME OF THE EARLY SNOW HAS MELTED OR BEEN EVAPORATED

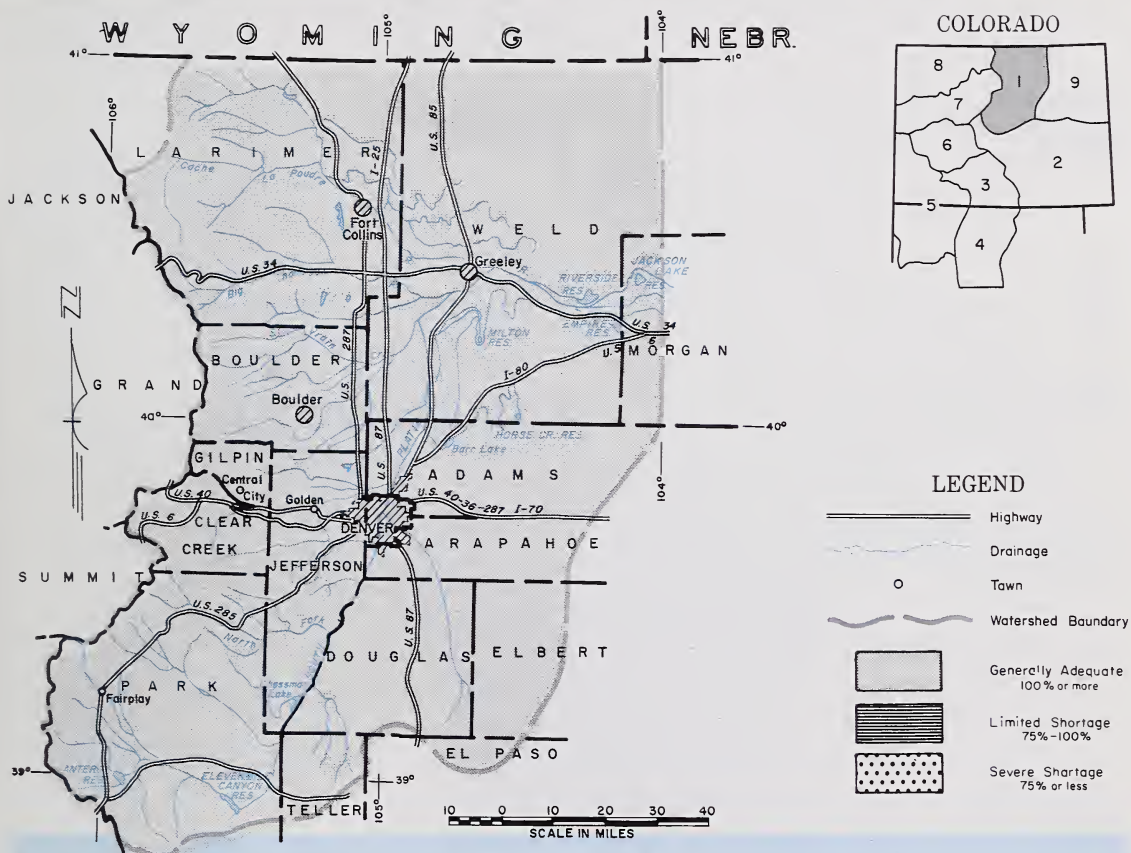
BY THE WIND. RESERVOIR STORAGE IS NEAR NORMAL ON THE RIO GRANDE BASIN, EXCEPT ELEPHANT BUTTE WHICH IS 150%. THE PECOS DRAINAGE HAS NEAR NORMAL STORAGE WHILE CONCHAS RESERVOIR ON THE CANADIAN CONTAINS 140% OF NORMAL SUPPLIES. MOUNTAIN SOILS ARE IN GOOD SHAPE ON THE PECOS AND RIO GRAND DRAINAGE. SOILS ARE DRY ON CHAMA AND RED RIVER DRAINAGE. MUCH SNOW IS NEEDED TO INSURE ADEQUATE WATER SUPPLIES THIS SUMMER.

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

February 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

IF THE CURRENT SNOW TREND CONTINUES, WATER SUPPLIES SHOULD BE EXCELLENT. THE SNOW PACK IS EXTREMELY GOOD. SOME OF THE SNOW COURSES SHOW MORE SNOW THAN ANY OTHER TIME ON RECORD.

RESERVOIR STORAGE IS 138% OF NORMAL. THIS WILL SUPPLY MUCH NEEDED SUPPLEMENTAL WATER IF NEEDED.

SOILS IN THE IRRIGATED AREAS ARE REPORTED TO BE IN GOOD CONDITION.

This report prepared by

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT and Forecast Period	Forecast	Last Years Flow	Average ⁺
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No numerical
forecasts issued
until March 1, 1970

- (1) Observed flow minus by-pass to power plants.
(2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions.
(3) Observed flow minus diversion through August P. Gumlick Tunnel.
(4) Observed flow minus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁺

Big Thompson	5	160	168
Boulder	3	177	156
Cache La Poudre	7	139	175
Clear Creek	6	153	166
Saint Vrain	3	154	149
South Platte	3	172	169

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁺

Antero	33.0	15.9	16.0	10.6
Barr Lake	32.2	25.9	18.4	17.6
Black Hollow	8.0	4.0	3.7	3.3
Boyd Lake	44.0	30.0	38.3	27.6
Cache La Poudre	9.5	8.4	3.9	6.6
Carter Lake	108.9	81.2	79.5	61.9
Chambers Lake	8.8	2.5	2.3	2.3
Cheesman	79.0	79.1	39.8	45.6
Cobb Lake	34.3	17.9	14.9	9.9
Eleven Mile	97.8	96.4	95.0	72.0
Fossil Creek	11.6	10.0	5.2	5.4
Gross	43.1	36.8	34.1	24.9

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WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season

Bear Creek	Good	Good
Coal Creek	Good	Good
Deer Creek	Good	Good
North Fork of So. Platte	Good	Good
North Fork of Cache La Poudre	Good	Good
Ralston Creek	Good	Good
Rock Creek	Good	Good

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁺

Big Thompson	3	136	124
Boulder	1	87	92
Cache La Poudre	2	173	148
Clear Creek	2	128	110
Saint Vrain	2	119	119
South Platte	2	107	100

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁺

Halligan	6.4	4.8	3.6	3.1
Horsetooth	143.5	82.0	90.2	81.2
Lake Loveland	14.3	11.8	5.0	7.9
Lone Tree	9.2	8.5	1.8	6.0
Mariano	5.4	5.1	4.8	3.7
Marshall	10.3	7.0	1.8	2.1
Marston	18.0	15.9	14.7	14.1
Milton	24.4	13.1	14.2	9.0
Standley	18.5	28.6	18.1	7.9
Terry Lake	8.2	0.0	4.5	4.6
Union	12.7	11.8	3.3	7.8
Windsor	18.6	12.9	9.2	7.6



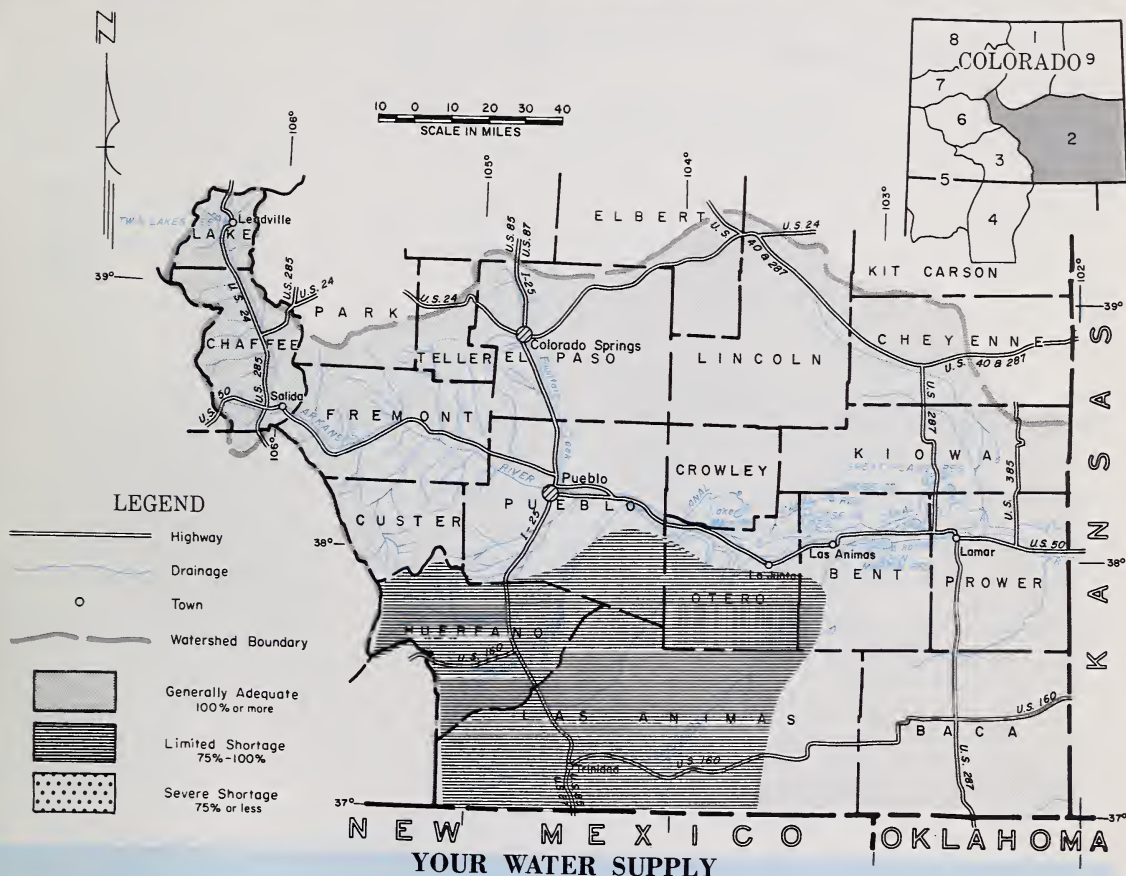
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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE ARKANSAS RIVER WATERSHED IN COLORADO

as of
February 1, 1970

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



THE SNOW PACK IN THE UPPER ARKANSAS IS 145% OF THE 1953-67 AVERAGE. THE CUCHARAS AND PURGATORIE SNOW PACK IS 81%. THE RESERVOIR STORAGE IS NOW 161% OF AVERAGE AND 370% OF LAST YEAR. SOIL MOISTURE IN THE MOUNTAIN AND IRRIGATED SOILS IS ABOVE AVERAGE. NORMAL SNOWFALL THROUGHOUT THE REMAINDER OF THE SEASON IS NEEDED TO ASSURE ADEQUATE WATER SUPPLIES THIS SUMMER.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT and Forecast Period	Forecast	Last Years Flow	Average [†]

No numerical
forecasts issued
until March 1, 1970

(1) Observed flow plus change in Clear Creek, Twin Lakes,
and Turquoise Reservoirs minus diversions through Busk-
Ivanhoe, Divide, Twin Lakes and Homestake Tunnels and
Ewing, Front Pass, Wurtz and Colombine ditches.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average [†]
Arkansas	7	125	145
Cucharas and Purgatorie	1	104	81

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Ex-
cellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Apishapa	Avg.	Poor
Fountain Creek	Good	Good
Grape Creek	Good	Good
Hardscrabble Creek	Good	Good
Huerfano	Good	Avg.
Monument Creek	Good	Avg.

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average [†]
Arkansas	3	135	104
Cucharas and Purgatorie	1	82	114

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

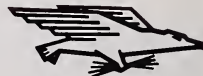
RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average [†]
Adobe Creek	61.6	17.3	0.0	11.5
Clear Creek	11.4	10.2	7.8	6.6
Cucharas	40.0	0.2	0.7	6.9
Great Plains	150.0	98.2	6.3	26.9
Horse Creek	26.9	9.5	0.0	4.6

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average [†]
John Martin	353.9	39.9	11.8	81.5
Meredith	41.9	25.3	0.0	5.7
Model	15.0	1.2	1.5	2.6
Turquoise	130.0	42.4	22.1	6.9
Twin Lakes	57.9	34.8	25.0	19.7

[†] 1953-1967 period.

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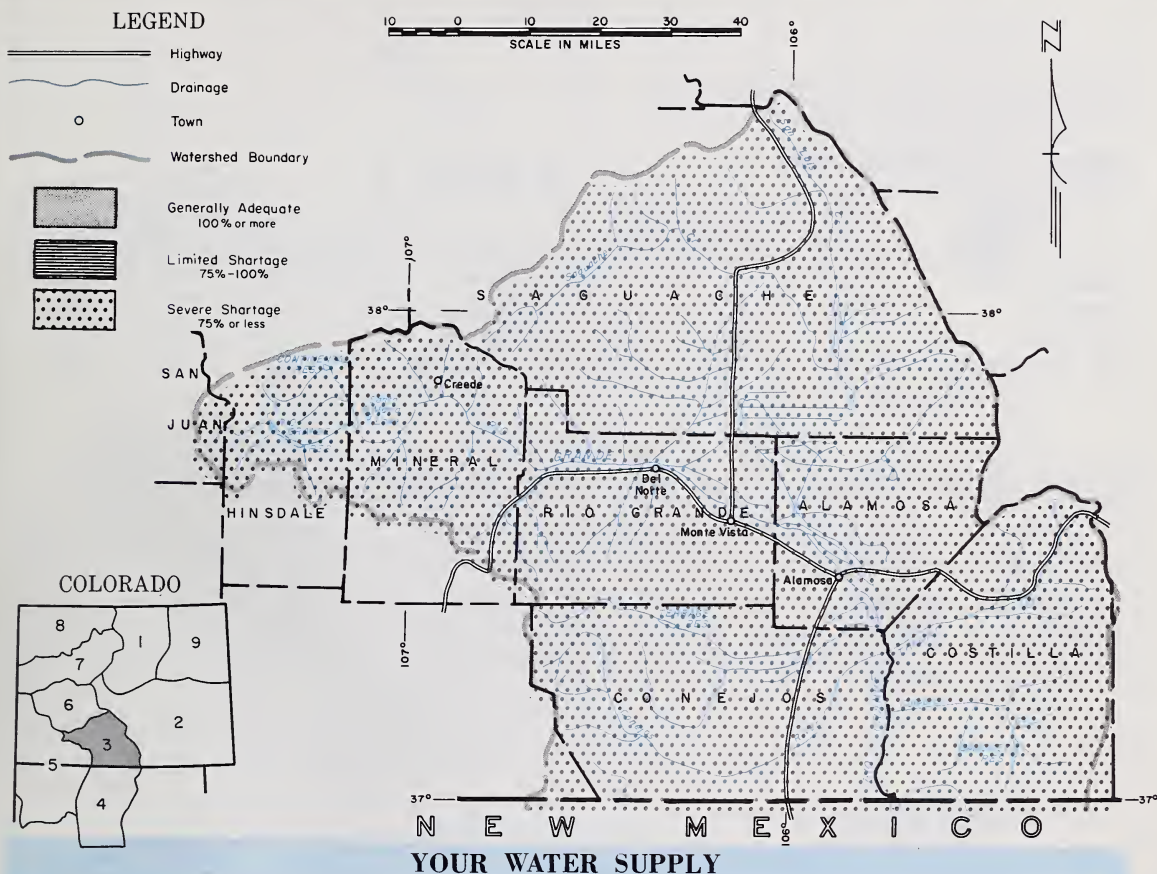
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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE UPPER RIO GRANDE WATERSHED IN COLORADO

as of

February 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



CONSIDERABLY MORE SNOW IS NEEDED ON THE RIO GRANDE DRAINAGE. CURRENT SNOW PACK IS LESS THAN 75% OF NORMAL. THIS COULD RESULT IN POOR WATER SUPPLIES THIS SUMMER UNLESS THE NEXT FEW MONTHS PRODUCE GOOD SNOWFALL.

CARRY-OVER RESERVOIR STORAGE IS GOOD AND WILL HELP SOME IF WATER SUPPLIES ARE POOR.

SOIL MOISTURE IS ALSO GOOD AND WILL TEND TO INCREASE RUNOFF. THERE IS STILL TIME TO INCREASE SNOW PACK.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT and Forecast Period	Forecast	Last Years Flow	Average †
No numerical forecasts issued until March 1, 1970			
(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.			

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average †
Alamosa	2	44	59
Conejos	2	45	60
Culebra	2	108	77
Rio Grande	10	71	73

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average †
Continental	26.7	5.5	4.7	3.8
Platoro	60.0	3.0	3.0	7.1
Rio Grande	45.8	26.7	20.2	10.9

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Saguache Creek	Poor	Poor
Sangre de Cristo Creek	Poor	Poor
Trinchera Creek	Poor	Poor

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average †
Alamosa	2	150	131
Conejos	1	151	129
Culebra	2	86	109
Rio Grande	3	112	124

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average †
Sanchez	103.2	18.9	11.7	10.6
Santa Maria	45.0	5.9	3.5	5.3
Terrace	17.7	11.7	11.3	3.5

+ 1953-1967 period.

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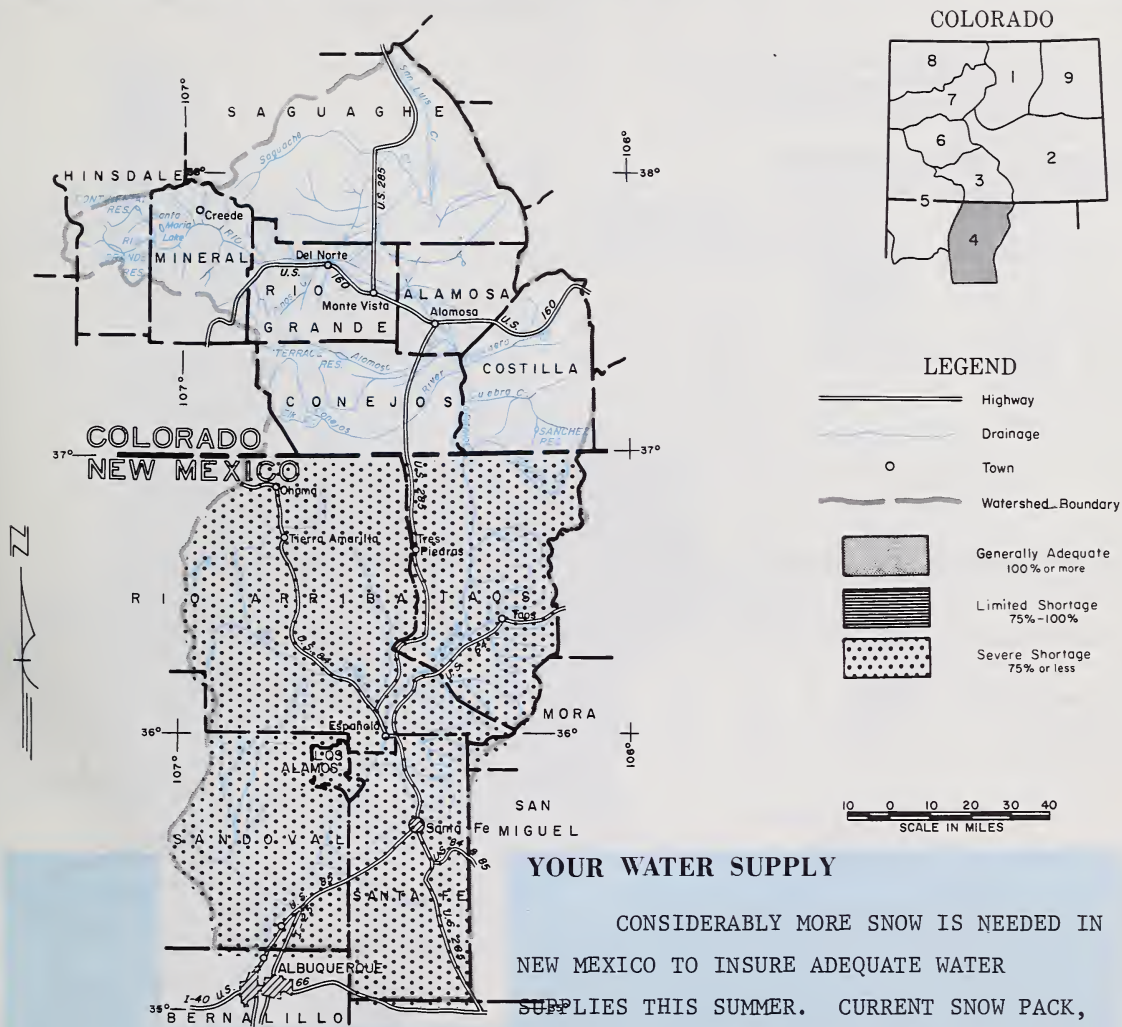
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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE RIO GRANDE WATERSHED IN NEW MEXICO

as of

February 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT and Forecast Period	Forecast	Last Years Flow	Average +
No numerical forecasts issued until March 1, 1970			
<p>The forecast of the Rio Grande at San Marcial is % of the Average used by the Elephant Butte Irrigation District.</p> <p>(1) Observed flow plus change in Costilla Reservoir.</p> <p>(2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.</p>			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Embudo	Poor	Poor
Jemez River	Poor	Poor
Mora River	Poor	Poor
Nambe Creek	Poor	Poor
Rio Ojo Caliente	Poor	Poor
Rio Pueblo de Taos	Poor	Poor
Santa Fe Creek	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average +
Pecos	1	27	23
Rio Chama	3	29	53
Rio Grande, N.M.	12	49	54
Rio Hondo	1	81	--
Red River	2	95	51

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average +
Pecos	2	118	100
Rio Chama	2	58	84
Rio Grande	5	156	126
Red River	1	111	91

RESERVOIR STORAGE (Thousand Ac. Ft.)

RESERVOIR	Usable Capacity	END OF MONTH Usable Storage		
		This Year	Last Year	Average +
Alamogordo	111	77	67	73
Caballo	344	44	47	47
Conchas	273	230	121	163

RESERVOIR STORAGE (Thousand Ac. Ft.)

RESERVOIR	Usable Capacity	END OF MONTH Usable Storage		
		This Year	Last Year	Average +
Elephant Butte	2195	564	382	374
Elvado	195	1	1	4
McMillan-Avalon	38	38	7	19

+ 1953-1967 period.

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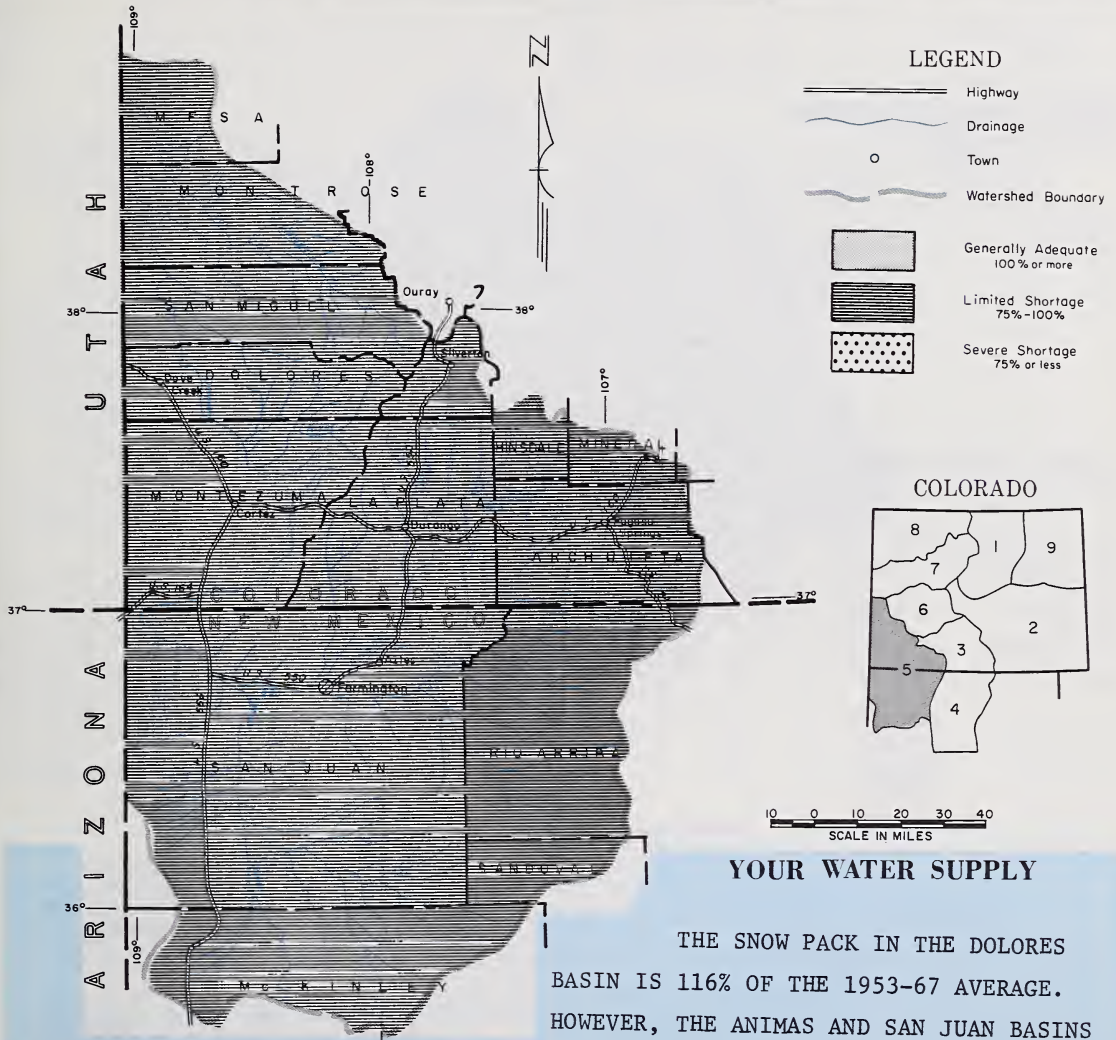
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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE SAN MIGUEL, DOLORES, ANIMAS, SAN JUAN WATER SHEDS IN COLORADO AND NEW MEXICO

February 1, 1970

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



THE SNOW PACK IN THE DOLORES BASIN IS 116% OF THE 1953-67 AVERAGE. HOWEVER, THE ANIMAS AND SAN JUAN BASINS ARE BELOW AVERAGE WITH 92% AND 65% OF AVERAGE SNOW PACK, RESPECTIVELY. RESERVOIR STORAGE IN THE SMALL RESERVOIRS IS 175% OF AVERAGE. THE NAVAJO RESERVOIR CONTAINS 1,035,000 ACRE-FEET WHICH IS 107% OF LAST YEAR. SOIL MOISTURE IS NEAR AVERAGE.

This report prepared by

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT and Forecast Period	Forecast	Last Years Flow	Average ⁺
---------------------------------------	----------	-----------------------	----------------------

No numerical
forecasts issued
until March 1, 1970

(1) Observed flow plus change in storage in Vallecito Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁺

Animas	6	62	92
Dolores	4	74	116
San Juan	5	47	65

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season

Florida	Avg.	Poor
Mancos	Avg.	Poor
San Miguel	Avg.	Poor

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁺

Animas	3	155	89
Dolores	3	121	92
San Juan	2	143	104

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁺

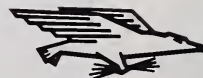
Groundhog	22	13	13	7
Lemon	40	30	21	14
Navajo	1696	1035	965	283
Vallecito	126	74	67	46

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁺

+ 1953-1967 period.

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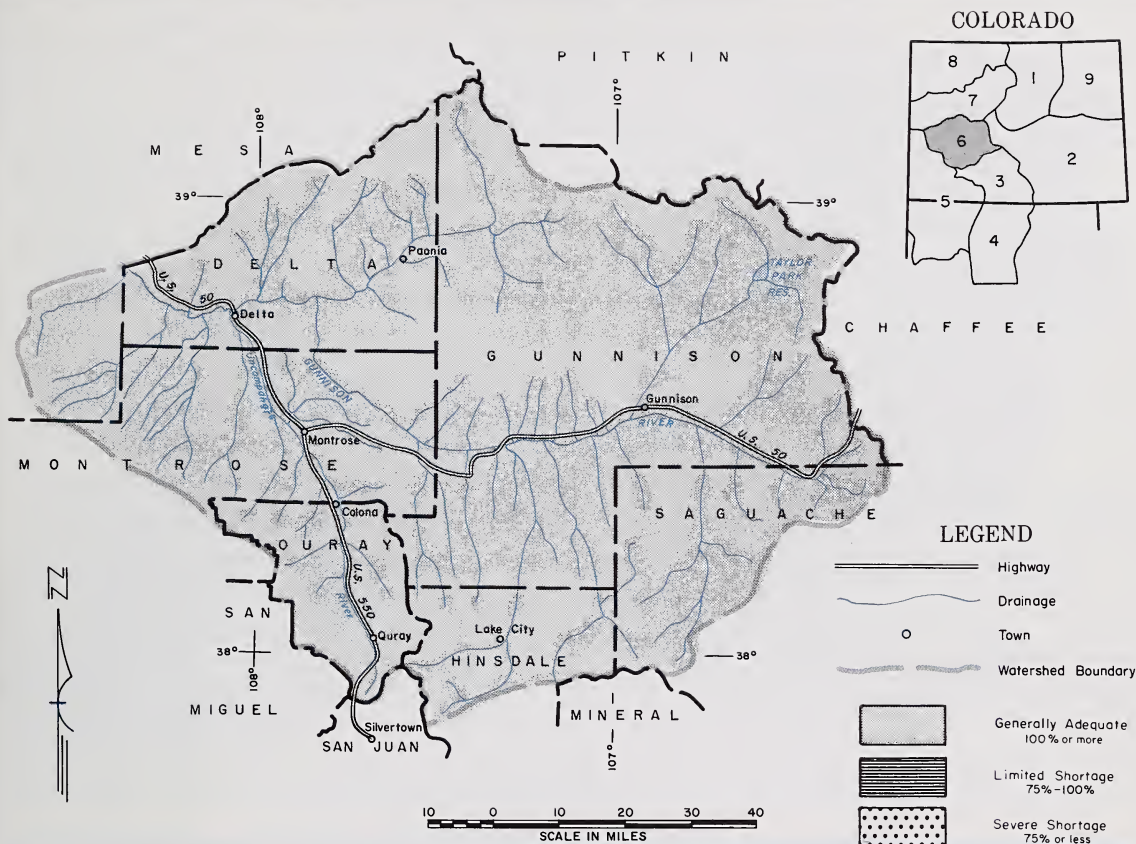
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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE GUNNISON RIVER WATERSHED IN COLORADO

as of

February 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



THE SNOW PACK IN THE GUNNISON BASIN IS ABOVE NORMAL, HOWEVER, NOT AS GOOD AS LAST YEAR. SNOW ON THE UNCOMPAHGRE IS 133% OF NORMAL. SOIL MOISTURE IN THE MOUNTAINS IS NEAR NORMAL. VALLEY SOILS ARE REPORTED TO BE IN GOOD CONDITION. CARRY-OVER STORAGE IN TAYLOR RESERVOIR IS 95,000 ACRE FEET WHICH IS ABOUT 175% OF NORMAL.

IF SUBSEQUENT MONTHS SNOWFALL IS AT LEAST NORMAL, WATER SUPPLIES SHOULD BE ADEQUATE THIS SUMMER.

This report prepared by
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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT and Forecast Period	Forecast	Last Years Flow	Average ⁺
No numerical forecasts until March 1, 1970			
(1) Observed flow plus change in storage in Blue Mesa and Morrow Point Reservoirs.			

SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁺
Gunnison	10	93	123
Surface Creek	3	72	111
Uncompahgre	3	97	133

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
North Fork of Gunnison Taylor	Good Good	Good Good

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁺
Gunnison	1	105	116
Surface Creek	1	109	100
Uncompahgre	1	109	100

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

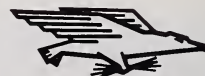
RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁺
Blue Mesa	829.6	606.1	442.4	- -
Morrow Point	121.1	39.5	106.2	- -
Taylor	106.2	95.0	37.6	53.8

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁺

+ 1953-1967 period.

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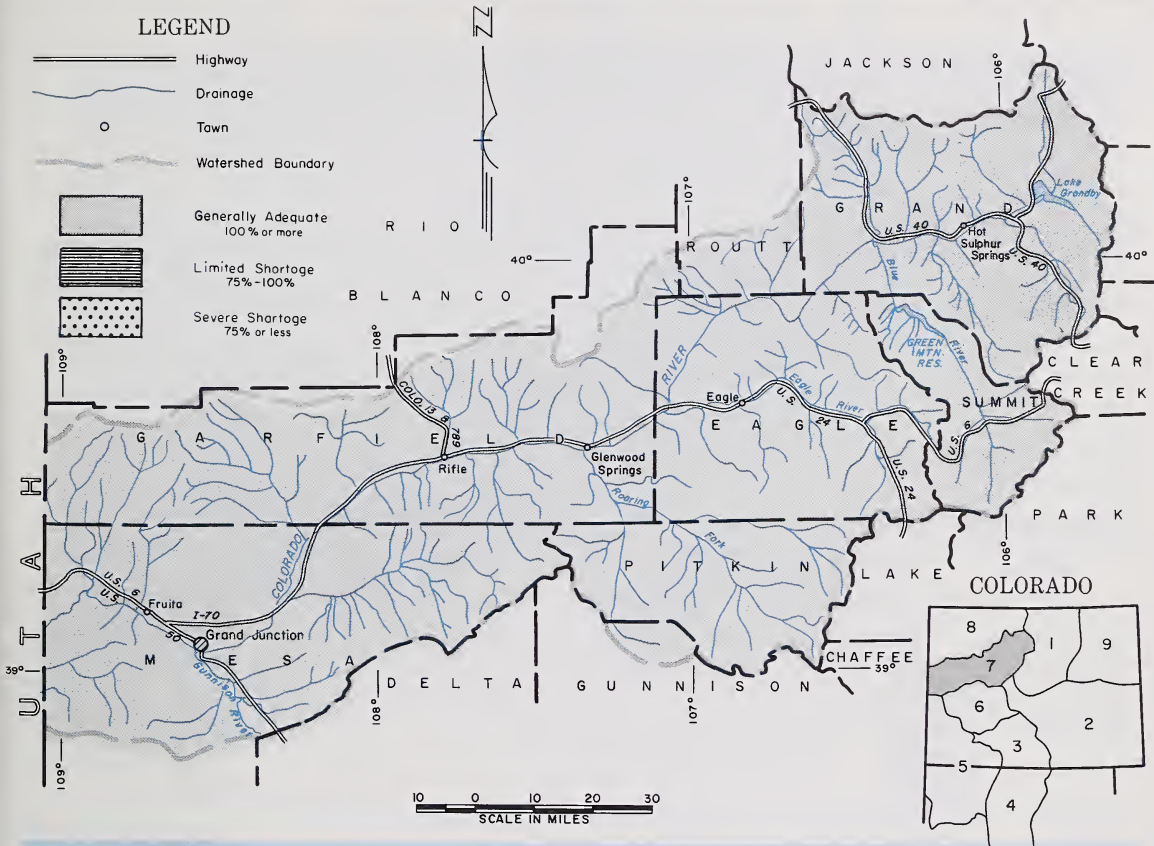
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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE COLORADO RIVER WATERSHED IN COLORADO as of

February 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

LEGEND



YOUR WATER SUPPLY

CURRENT SNOW PACK IN THE COLORADO RIVER BASIN IS MUCH ABOVE THE 1953-67 AVERAGE. THE MAINSTEM OF THE COLORADO IS 152% WHILE THE BLUE RIVER IS 171% AND THE WILLIAMS FORK IS 159%. THE ROARING FORK IS 128% AND PLATEAU CREEK IS 101%. MOISTURE IN THE MOUNTAIN AND IRRIGATED SOILS IS ABOVE AVERAGE. THE RESERVOIR STORAGE IS 135% OF THE AVERAGE AND 125% OF LAST YEAR. ADEQUATE SUMMER WATER SUPPLIES WILL BE ASSURED WITH NORMAL SNOWFALL THROUGHOUT THE REMAINDER OF THE SEASON.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT and Forecast Period	Forecast	Last Years Flow	Average †
No numerical forecasts issued until March 1, 1970			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Brush Creek	Good	Good
Eagle River	Good	Good
Gypsum Creek	Good	Good

- (1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir.
 (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch.
 (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs.
 (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir.
 (5) Observed flow plus diversions through August P. Gumlick Tunnel.
 (6) Observed flow plus the changes as indicated in (3) and (4).

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average †
Blue River	7	135	171
Colorado	18	118	152
Plateau	3	66	101
Roaring Fork	7	98	128
Williams Fork	3	117	159
Willow	2	114	146

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average †
Blue River	1	115	111
Colorado	4	118	111
Roaring Fork	1	127	125
Willow	1	112	96

RESERVOIR STORAGE (Thousand Ac. Ft.)

END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average †
Dillon	254.0	238.8	240.1	130.9
Granby	465.5	285.1	166.1	253.6
Green Mountain	146.9	87.4	86.3	72.5
Homestake	43.0	20.0	21.4	- -

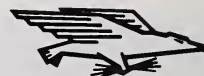
RESERVOIR STORAGE (Thousand Ac. Ft.)

END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average †
Ruedi	101.0	75.3	47.8	- -
Williams Fork	96.8	51.0	36.9	32.5
Willow Creek	9.0	6.7	6.6	- -
Vega	32.1	13.3	10.0	10.5

+ 1953-1967 period.

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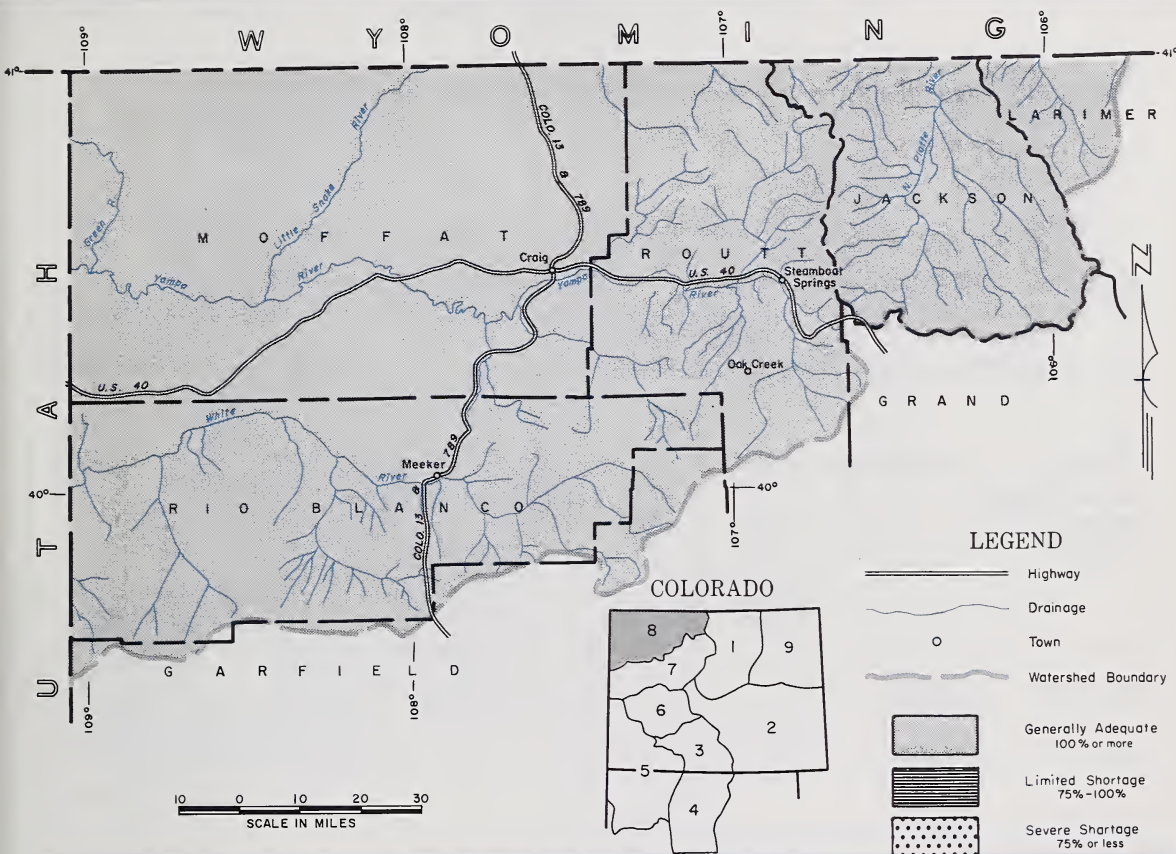
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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of

February 1, 1970

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

SNOW PACK IS EXCELLENT IN THESE BASINS. ELK RIVER IS THE LOWEST WITH 101% OF THE 1953-67 AVERAGE. THE LARAMIE AND NORTH PLATTE ARE HIGH WITH 162% AND 154% WHILE THE WHITE AND YAMPA ARE 128% AND 133%. SOIL MOISTURE IS HIGH EXCEPT ON THE YAMPA, WHICH IS BELOW NORMAL. WITH NORMAL SNOWFALL THROUGHOUT THE REMAINDER OF THE YEAR, SUMMER WATER SUPPLIES SHOULD BE ADEQUATE.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT and Forecast Period	Forecast	Last Years Flow	Average +
No numerical forecasts issued until March 1, 1970			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Canadian River	Good	Good
Hunt Creek	Good	Good
Illinois River	Good	Good
Michigan River	Good	Good
Oak Creek	Good	Good
Trout Creek	Good	Good

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

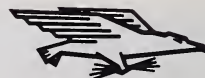
RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average +
Elk	2	76	101
Laramie	2	147	162
North Platte	5	108	154
White	2	92	128
Yampa	5	100	133

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average +
Laramie	2	173	148
North Platte	2	117	105
Yampa	1	70	52

+ 1953-1967 period.

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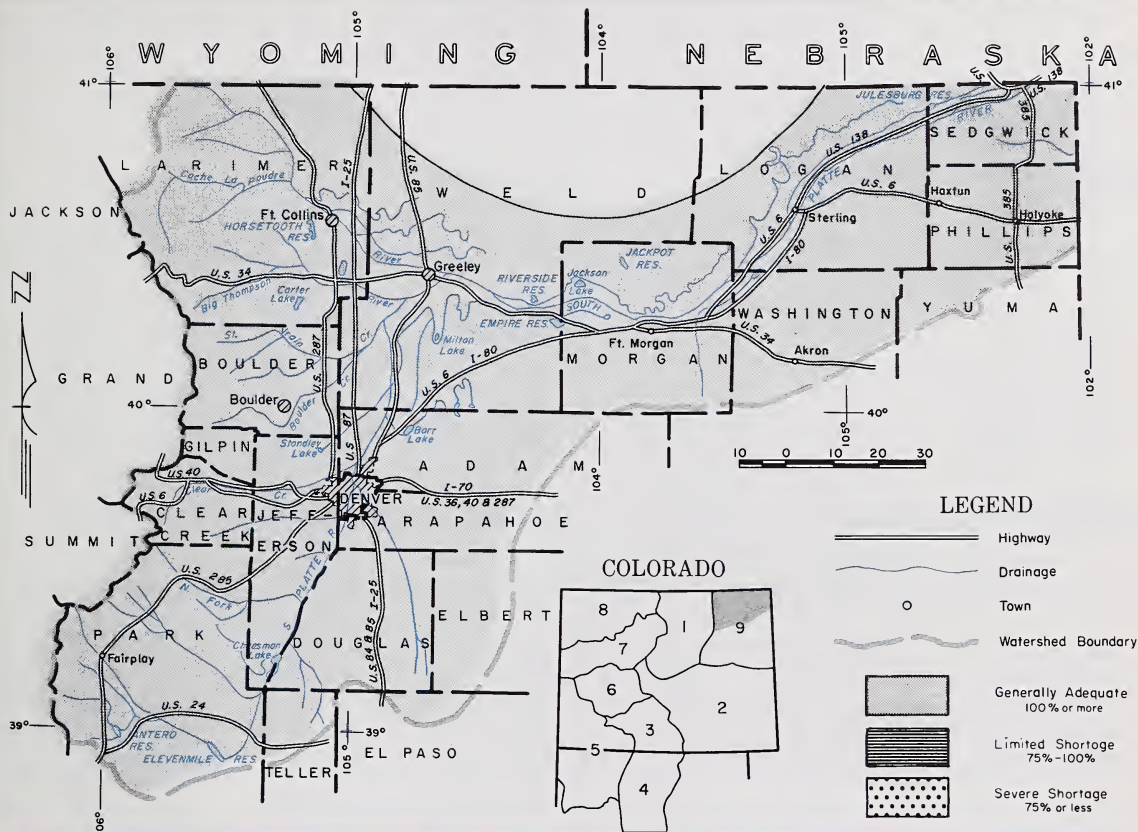
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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

February 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

OUTLOOK FOR SUMMER WATER SUPPLIES ARE MOST OPTIMISTIC. THE CURRENT SNOW PACK IS MUCH ABOVE NORMAL DESPITE THE RATHER POOR SNOWFALL DURING JANUARY. SNOW PACK IS ABOUT 170% OF NORMAL OVER MOST OF THE BASIN.

SOIL MOISTURE IN THE HIGH COUNTRY IS EXCELLENT AND THE VALLEY STATIONS ARE REPORTING GOOD SOIL MOISTURE CONDITIONS.

CARRY-OVER STORAGE IN THE BASINS MANY RESERVOIRS IS ABOUT 130% OF NORMAL. THIS IS AN EXCELLENT SUPPLEMENTAL SUPPLY.

This report prepared by

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT and Forecast Period	Forecast	Last Years Flow	Average †
No numerical forecasts issued until March 1, 1970			
(1) Observed flow plus by-pass to power plants. (2) Observed flow minus diversions through August P. Gumlick Tunnel. (3) Observed flow plus change in storage in Price Reservoir.			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
South Platte from Greeley to Ft. Morgan	Good	Good
South Platte from Ft. Morgan to Sterling	Good	Good
South Platte below Sterling	Good	Good

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average †
Big Thompson	5	160	168
Boulder	3	177	156
Cache La Poudre	7	139	175
Clear Creek	6	153	166
Saint Vrain	3	154	149
South Platte	3	172	169

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average †
Big Thompson	3	136	124
Boulder	1	87	92
Cache La Poudre	2	173	148
Clear Creek	2	128	110
Saint Vrain	2	119	119
South Platte	2	107	100

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

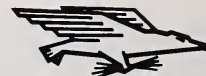
RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average †
Carter	108.9	81.2	79.5	61.9
Cheesman	79.0	79.1	39.8	45.6
Eleven Mile	97.8	96.4	95.0	72.0
Empire	37.7	29.6	26.0	22.3
Horsetooth	143.5	82.0	90.2	81.2

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average †
Jackson	35.4	29.2	27.4	27.4
Julesburg	28.2	20.1	20.5	20.0
Point of Rocks	70.0	66.4	50.6	43.2
Prewitt	32.8	19.8	9.0	11.4
Riverside	57.5	55.7	27.2	38.7

+ 1953-1967 period.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of February 1, 1970

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG. 53-67
NORTH PLATTE BASIN					
<u>Laramie River</u>					
Deadman Hill	1/30	54	15.5	10.5	8.7
McIntyre	NS			-	-
Roach	1/26	42	14.5	9.9	9.8
<u>North Platte River</u>					
Cameron Pass	1/28	79	23.2	20.3	12.9
Columbine Lodge	1/28	73	18.1	17.9	13.6
Northgate	1/28	22	5.3	5.3	3.6
Park View	1/26	32	8.3	7.4	5.2
Willow Cr. Pass (B)	1/26	38	10.3	9.4	7.1
SOUTH PLATTE BASIN					
<u>Boulder Creek</u>					
Baltimore	1/29	31	6.4	4.0	5.2
Boulder Falls	1/30	43	11.8	7.1	6.6
University Camp	1/30	56	17.2	8.9	10.9
<u>Big Thompson River</u>					
Deer Ridge	1/30	27	7.0	2.4	2.6
Hidden Valley	1/30	42	11.8	6.6	5.9
Lake Irene (B)	1/27	63	17.2	13.2	13.0
Long's Peak	1/31	37	10.9	5.4	5.6
Two Mile	1/30	42	11.8	9.1	7.9
<u>Cache La Poudre</u>					
Bennett Creek	1/31	32	8.3	3.9	-
Big South	2/1	11	2.2	0.8	1.6
Cameron Pass	1/28	79	23.2	20.3	12.9
Chambers Lake	2/1	39	11.0	6.2	5.2
Deadman Hill	1/30	54	15.5	10.5	8.7
Hour Glass Lake	NS			-	3.1
Joe Wright	1/28	76	21.1	15.8	-
Lost Lake	2/1	47	12.2	7.5	7.2
Pine Creek	1/29	6	1.3	0.8	1.2
Red Feather	1/29	24	5.7	5.0	3.8
<u>Clear Creek</u>					
Baltimore (B)	1/29	31	6.4	4.0	5.2
Berthoud Falls	1/29	54	12.6	8.2	8.0
Empire	1/29	33	8.6	3.4	4.3
Grizzly Peak (B)	1/29	68	17.5	12.0	9.8
Loveland Lift	1/29	68	18.3	14.2	12.9
Loveland Pass	1/29	62	17.4	11.0	8.5
<u>Saint Vrain River</u>					
Copeland Lake	1/29	18	4.1	3.0	2.6
Ward	1/28	26	6.0	3.5	3.4
Wild Basin	1/28	40	9.1	-	6.9
<u>South Platte River</u>					
Como	1/27	34	8.4	4.5	-
Geneva Park	1/28	26	5.9	2.6	2.7
Horseshoe Mt.	1/26	42	9.6	6.7	-
Hoosier Pass	1/28	53	12.9	7.2	7.6
Jefferson Creek	1/27	36	8.3	6.0	5.7
Mosquito	1/27	43	11.7	6.7	-
Trout Creek Pass	1/26	20	4.7	3.6	-
ARKANSAS BASIN					
<u>Arkansas River</u>					
Bigelow Divide	1/29	25	6.3	-	-
Cooper Hill (B)	1/30	47	10.6	7.6	-
East Fork	1/28	41	10.0	7.2	5.6
Four Mile Park	1/30	28	5.7	4.4	3.5
Fremont Pass	1/28	59	14.6	10.5	9.5
Garfield	1/30	36	9.9	9.2	8.4
Hermit Lake	1/29	21	5.1	-	-
Monarch Pass	1/30	47	14.0	12.3	10.3
Tennessee Pass	1/30	42	9.9	7.7	6.2
Twin Lakes Tunnel	1/24	31	7.6	6.2	6.0
Westcliffe	1/29	22	5.4	4.8	-

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG. 53-67
<u>Cucharas River</u>					
Blue Lakes	1/28	0	0.0	-	2.3
Cucharas Pass	1/28	15	3.2	3.3	-
LaVeta Pass (B)	1/28	16	5.0	4.8	6.2
<u>Purgatorie River</u>					
Bourbon	1/29	17	4.1	3.0	-
RIO GRANDE BASIN-COLO					
<u>Alamosa River</u>					
Silver Lakes	1/28	7	1.2	5.8	3.9
Summitville (A)	1/29	42	8.0	15.2	11.6
<u>Conejos River</u>					
Cumbres (A)	1/29	28	6.7	21.2	13.2
Platoro (A)	1/29	31	8.9	13.3	12.9
River Springs	NS			5.4	4.8
<u>Culebra River</u>					
Brown Cabin	1/30	12	4.5	4.2	-
Cottonwood (B)	1/30	9	3.2	3.8	-
Culebra	1/29	20	4.1	3.6	5.7
LaVeta Pass (B)	1/28	16	5.0	4.8	6.2
Trinchera (B)	1/29	22	5.8	5.8	-
<u>Rio Grande</u>					
Cochetopa Pass	1/28	32	6.7	2.5	3.4
Grayback	NS			-	-
Hiway	1/29	39	11.7	18.8	15.7
Lake Humphrey	1/27	14	3.3	3.8	5.6
Love Lake (A)	1/29	21	5.2	2.8	-
Pass Creek	1/29	13	3.7	8.8	8.9
Pool Table	1/27	17	3.7	2.4	6.1
Porcupine	1/30	29	7.0	5.7	8.2
Santa Maria	1/29	7	1.8	3.3	3.4
Upper Rio Grande	1/26	14	2.6	5.7	5.4
Wolf Creek Pass	1/29	42	11.8	23.1	17.8
Wolf Cr. Sum. (B)	1/29	42	15.0	21.3	17.7
RIO GRANDE BASIN-N.M.					
<u>Pecos River</u>					
Panchuela	1/27	2	0.6	2.2	2.6
<u>Rio Chama</u>					
Bateman	1/29	23	6.4	-	7.0
Capulin Peak	1/28	12	2.8	4.8	3.3
Chama Divide	1/28	0	0.0	5.2	3.3
Chamita	1/28	14	3.4	11.1	5.0
<u>Rio Grande</u>					
Aspen Grove	NS			-	3.5
Big Tesuque	1/28	8	2.2	3.8	3.7
Bluebird Mesa	1/28	8	2.0	4.6	3.8
Cordova (A)	1/29	18	4.3	10.0	6.3
Elk Cabin	1/30	4	0.8	2.0	2.9
Fenton Hill	1/27	4	1.2	5.5	3.0
Pajarito Peak	1/28	3	0.9	0.6	1.3
Payrole (A)	1/29	13	2.9	9.8	5.9
Quemazon	1/29	20	4.2	5.8	6.5
Rio En Medio	1/28	16	3.8	2.6	6.1
Sandoval	1/29	6	1.2	3.0	3.7
Taos Canyon	1/28	7	1.4	4.1	3.4
Tres Ritos	1/27	9	2.9	3.9	3.5
<u>Rio Hondo</u>					
Twinning	1/29	23	6.3	7.8	-
<u>Red River</u>					
Hematite Park (B)	1/28	8	1.8	1.3	3.4
Red River	1/28	10	2.2	2.9	4.4

NOTE:

- NS - No Survey
- (A) - Air Observed
- (B) - On Adjacent Drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of February 1, 1970

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG. 53-67
SAN JUAN-DOLORES BASIN					
<u>Animas River</u>					
Cascade	1/28	19	3.6	13.3	8.0
Lemon	1/27	6	1.3	9.5	-
Mineral Creek	1/28	43	10.2	13.3	8.9
Molas Lake	1/28	31	7.7	12.5	8.4
Purgatory	1/29	48	11.7	16.5	-
Red Mountain Pass	1/28	73	21.3	23.3	17.0
Silverton Sub-Sta.	1/28	14	2.8	8.5	4.8
Spud Mountain	1/28	40	11.6	21.7	15.0
<u>Dolores River</u>					
Lizzard Head	1/29	40	10.8	14.2	9.4
Lone Cone	1/30	39	10.2	14.1	-
Rico	1/29	17	4.4	10.6	5.0
Telluride	1/29	23	6.3	5.9	4.5
Trout Lake	1/29	36	9.3	11.1	7.6
<u>San Juan River</u>					
Chama Divide (B)	1/28	0	0.0	5.2	3.3
Chamita (B)	1/28	14	3.4	11.1	5.0
Upper San Juan	1/29	39	11.0	26.7	19.4
Wolf Cr. Pass (B)	1/29	42	11.8	23.1	17.8
Wolf Cr. Summit	1/29	42	15.0	21.3	17.7
GUNNISON BASIN					
<u>Gunnison River</u>					
Alexander Lake	1/29	52	14.5	18.2	11.5
Blue Mesa	NS			-	-
Butte	1/30	46	12.3	12.0	-
Cochetopa Pass (B)	1/28	32	6.7	2.5	3.4
Crested Butte	1/29	39	9.1	11.7	7.5
Keystone	1/29	59	15.2	15.5	12.6
Lake City	1/27	32	7.3	4.2	-
Mesa Lakes (B)	1/29	48	11.2	15.8	10.3
McClure Pass	1/26	34	10.2	11.8	11.6
Park Cone	1/27	33	10.2	9.1	6.2
Park Reservoir	1/29	55	14.1	21.0	14.1
Porphyry Creek	1/30	48	14.1	10.5	10.1
Tomichi	1/30	38	11.4	9.6	7.5
<u>Surface Creek</u>					
Alexander Lake	1/29	52	14.5	18.2	11.5
Mesa Lakes (B)	1/29	48	11.2	15.8	10.3
Park Reservoir	1/29	55	14.1	21.0	14.1
<u>Uncompahgre River</u>					
Ironton Park	1/30	41	11.1	10.7	7.6
Red Mountain Pass	1/28	73	21.3	23.3	17.0
Telluride (B)	1/29	23	6.3	5.9	4.5
COLORADO BASIN					
<u>Blue River</u>					
Blue River	1/28	41	8.1	6.4	5.1
Fremont Pass	1/28	59	14.6	10.5	9.5
Frisco	1/28	35	7.9	6.3	4.3
Grizzly Peak	1/29	68	17.5	12.0	9.8
Hoosier Pass (B)	1/28	53	12.9	7.2	7.6
Shrine Pass	1/28	63	16.2	14.4	9.6
Snake River	1/28	39	9.7	7.4	4.9
Summit Ranch	1/27	25	5.9	-	4.4
<u>Colorado River</u>					
Arrow	1/27	41	12.1	9.0	6.4
Berthoud Pass	1/27	48	12.9	9.3	8.3
Berthoud Summit	1/29	66	17.8	9.5	10.8
Cooper Hill	1/30	47	10.6	7.6	-
Fiddler Gulch	NS		-	-	8.7
Glenmar Ranch	1/26	29	6.4	6.6	4.7
Gore Pass	1/27	31	8.0	8.7	5.9
Grand Lake	1/29	31	7.0	7.3	4.8
Lake Irene	1/27	63	17.2	13.2	13.0
Lapland	NS		6.2	-	-
Lulu	NS		-	-	-
Lynx Pass	1/27	37	9.0	10.5	6.6
McKenzie Gulch	1/28	23	3.9	8.1	3.4
Middle Fork	1/26	33	7.3	7.3	5.4
Milner	1/27	46	12.1	10.8	8.7
North Inlet	1/28	37	7.6	6.7	5.3
Pando	1/28	38	9.5	8.3	5.7
Phantom Valley	1/27	38	9.4	9.0	6.1
Ranch Creek	1/27	35	8.5	6.7	5.1
Tennessee Pass (B)	1/30	42	9.9	7.7	6.2
Vail Pass	1/28	68	17.3	12.3	10.0
Vasquez	1/28	50	11.6	7.4	6.9
<u>Rearing Fork River</u>					
Aspen	1/28	45	13.0	12.5	8.9
Chapman	2/2	54	13.3	10.8	-
Independence Pass	1/24	48	12.2	11.8	9.5
Ivanhoe	1/27	56	16.3	12.5	9.6
Kiln	1/27	40	9.6	10.2	-
Last Chance	1/28	35	7.8	8.1	-
Lift	1/28	43	12.9	12.7	10.3
McClure Pass	1/26	34	10.2	11.8	11.6
Nast	1/28	28	5.6	6.4	3.7
North Lost Trail	1/26	40	10.6	15.1	9.5
<u>Williams Fork River</u>					
Glenmar Ranch	1/26	29	6.4	6.6	4.7
Jones Pass	1/28	56	14.8	10.3	7.8
Middle Fork	1/26	33	7.3	7.3	5.4
<u>Willow Creek</u>					
Granby	1/26	28	6.8	5.6	4.6
Willow Cr. Pass	1/26	38	10.3	9.4	7.1
<u>Plateau Creek</u>					
Mesa Lakes	1/29	48	11.2	15.8	10.3
Park Reservoir	1/29	55	14.1	21.0	14.1
Trickle Divide	1/29	57	14.9	24.0	15.3
YAMPA BASIN					
<u>Elk River</u>					
Clark	1/29	31	7.0	11.0	8.3
Elk River	1/29	52	12.5	14.5	11.1
Hahn's Peak	1/29	42	9.8	12.9	-
<u>White River</u>					
Burro Mountain	1/29	49	12.5	14.6	10.7
Rio Blanco	1/28	50	12.6	12.6	8.9
<u>Yampa River</u>					
Bear River	NS		-	-	-
Columbine Lodge(B)	1/28	73	18.1	17.9	13.6
Dry Lake	1/27	50	13.7	14.5	12.2
Lynx Pass (B)	1/27	37	9.0	10.5	6.6
Rabbit Ears	1/28	83	22.4	20.4	15.9
Yampa View	1/28	51	12.8	12.6	8.8

NS - No Survey

(A) - Air Observed

(B) - On Adjacent Drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of February 1, 1970

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
<u>North Platte River</u>					
Muddy Pass	11/13/69	11.1	7.4	6.1	6.4
Willow Pass	11/14/69	9.5	6.4	5.7	6.7
SOUTH PLATTE BASIN					
<u>Boulder Creek</u>					
Alpine Camp	11/14/69	6.9	3.4	3.9	3.7
<u>Big Thompson River</u>					
Beaver Dam	10/23/69	7.1	5.5	3.6	3.8
Guard Station	10/23/69	6.9	3.4	2.9	3.4
Two Mile	10/23/69	9.1	6.9	5.1	5.5
<u>Clear Creek</u>					
Clear Creek	11/19/69	9.5	7.7	5.7	7.1
Hoop Creek	11/19/69	4.9	3.3	2.9	2.9
<u>Cache La Poudre River</u>					
Feather	11/4/69	10.1	8.3	4.0	4.5
Laramie Road	11/4/69	12.4	9.9	6.5	7.8
<u>South Platte River</u>					
Hoosier Pass	11/13/69	7.8	4.8	4.7	4.9
Kenosha Pass	11/13/69	4.4	2.7	2.3	2.6
ARKANSAS BASIN					
<u>Arkansas River</u>					
Garfield	10/30/69	6.7	4.4	3.1	3.9
Leadville	11/19/69	7.8	4.8	4.0	4.2
Twin Lakes Tunnel	11/13/69	4.5	1.6	0.9	2.3
RIO GRANDE BASIN - COLORADO					
<u>Conejos River</u>					
Mogote	10/31/69	10.7	7.1	4.7	5.5
<u>Rio Grande</u>					
Alberta Park	10/30/69	8.2	5.8	4.9	5.0
Bristol View	10/30/69	6.1	5.9	2.9	3.9
LaVeta	10/31/69	11.9	8.2	10.0	7.2
RIO GRANDE BASIN - NEW MEXICO					
<u>Rio Chama</u>					
Bateman	10/29/69	6.7	0.7	2.1	2.5
Chamita	10/24/69	8.0	3.4	5.0	2.4
<u>Rio Grande</u>					
Aqua Piedra	11/13/69	7.2	5.8	3.9	3.1
Big Tesuque	10/15/69	3.7	0.8	0.9	1.5
Fenton Hill	11/25/69	6.5	5.7	2.1	3.8
Rio En Medio	10/15/69	3.5	0.5	0.9	1.4
Taos Canyon	11/13/69	3.3	2.5	2.0	2.3
<u>Red River</u>					
Red Summit	11/13/69	4.8	2.0	1.8	2.2
ANIMAS - SAN JUAN BASINS					
<u>Animas River</u>					
Cascade	11/12/69	9.1	5.9	3.3	6.3
Mineral Creek	11/12/69	5.7	2.6	2.1	3.7
Molas Lake	11/12/69	9.4	4.5	3.0	4.6
<u>Dolores River</u>					
Dolores	11/12/69	19.6	8.2	9.8	6.7
Lizzard Head	11/12/69	11.8	4.4	3.7	8.3
Rico	11/12/69	13.8	10.4	5.5	9.9

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of February 1, 1970

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
GUNNISON BASIN					
<u>Gunnison River</u>					
King	10/30/69	3.3	2.2	2.1	1.9
COLORADO BASIN (Mainstem)					
<u>Blue River</u>					
Blue River	11/13/69	4.2	3.1	2.7	2.8
<u>Colorado River</u>					
Berthoud Pass	10/15/69	3.9	3.2	1.9	2.8
Gore	11/16/69	4.9	3.3	- -	2.5
Grand Mesa	10/15/69	12.5	9.3	8.5	9.3
Ranch Creek	10/15/69	8.7	5.7	5.0	6.0
Vail	11/19/69	12.3	9.5	8.1	6.9
<u>Roaring Fork River</u>					
Placita	12/2/69	9.3	6.5	5.1	5.2
YAMPA BASIN					
<u>Yampa River</u>					
Hahn's Peak	12/4/69	19.0	6.1	8.7	11.8

ALL PROFILES 4 FEET DEEP

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

Forest Service
Soil Conservation Service

Department of Interior

Bureau of Reclamation
Geological Survey
National Park Service
Indian Service

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Weather Bureau

War Department

Army Engineer Corps

Atomic Energy Commission

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Colorado Public Service Company
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MUNICIPALITIES

City of Denver	City of Greeley
City of Boulder	City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

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Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

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